AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A isolated protein having an amino acid sequence which is selected from a group consisting of SEQ ID NOs: 1, 3, 26 and 28 or a variant of said amino acid sequence, wherein one or more amino acids are substituted or deleted, or one or more amino acids are inserted or added, having the activity of transferring N-acetylgalactosamine to N- acetylglucosamine via a β1-4 linkage.

2. (original) The protein of Claim 1, wherein the amino acid sequence is shown in SEQ ID NO: 1 or 3.

3. (original) The protein of Claim 1, wherein the amino acid sequence is shown in SEQ ID NO: 26 or 28.

4. (original) The protein of Claim 1 having an identity of 50 % or more to the amino acid sequence shown in SEQ ID NO: 1 or 26.

5. (original) The protein of Claim 1 having an identity of 60 % or more to the amino acid sequence shown in SEQ ID NO: 1 or 26.

6. (currently amended) A isolated nucleic acid encoding the protein of ~~any one of Claims 1 to 5~~ Claim 1.

7. (currently amended) A nucleic acid encoding the protein of Claim 1 ~~or 2~~, which hybridizes with a nucleic acid having the nucleotide sequence shown in SEQ ID NO: 2 or 4 under stringent conditions.

8. (currently amended) A nucleic acid encoding the protein of Claim 1 ~~or 3~~, which hybridizes with a nucleic acid having the nucleotide sequence shown in SEQ ID NO: 27 or 29 under stringent conditions.

9. (original) The nucleic acid of Claim 7 having a nucleotide sequence represented by nucleotides 1-3120 of the nucleic acid sequence shown in SEQ ID NO: 2 or nucleotides 1-2997 of the nucleic acid sequence shown in SEQ ID NO: 4.

10. (original) The nucleic acid of Claim 8 having a nucleotide sequence represented by nucleotides 1-3105 of the nucleic acid sequence shown in SEQ ID NO: 27 or nucleotides 1-2961 of the nucleic acid sequence shown in SEQ ID NO: 29.

11. (currently amended) A recombinant vector containing the nucleic acid of ~~any one of Claims 6 to 10~~ Claim 6 and being capable of expressing said nucleic acid in a host cell.

12. (original) A host cell transformed with the recombinant vector of Claim 11.

13. (original) An analytical nucleic acid, which hybridizes to the nucleic acid of Claim 6 under stringent conditions.

14. (original) The analytical nucleic acid of Claim 13, which is used as a primer and is selected from a group consisting of SEQ ID NOs: 20, 21, 23 and 24.

15. (original) The analytical nucleic acid of Claim 13, which is used as a probe and is SEQ ID NO: 22 or 25.

16. (original) The analytical nucleic acid of Claim 13, which is used as a cancer marker.

17. (currently amended) An assay kit comprising the analytical nucleic acid of ~~any one of Claims 14 to 16~~ Claim 14 and assay instructions.

18. (currently amended) An antibody binding to the protein of ~~any one of Claims 1 to 5~~ Claim 1.

19. (original) The antibody of Claim 18, which is an monoclonal antibody.

20. (currently amended) A method for determining a canceration of a biological sample comprising the steps of: (a) quantifying the protein of ~~any one of Claims 1 to 5~~ Claim 1 in the biological sample; and (b) estimating that the biological sample is cancerous in a case that the quantity value of said protein in the biological sample is more than that in a control biological sample.

21. (currently amended) A method for determining a canceration of a biological sample comprising the steps of:

(a) quantifying a protein having an amino acid sequence which is selected from a group consisting of SEQ ID NOs: 1, 3, 26 and 28 or a variant of said amino acid sequence, wherein one or more amino acids are substituted or deleted, or one or more amino acids are inserted or added, having the activity of transferring N-acetylgalactosamine to N- acetylglucosamine via a β1-4 linkage, in the biological sample; and

(b) estimating that the biological sample is cancerous in a case that the quantity value of said protein in the biological sample is more than that in a control biological sample

~~The method of Claim 20,~~ wherein said protein is quantified by use of the antibody of claim 18~~Claims 18 or 19~~.

22. (Currently Amended) A method for determining a canceration of a biological sample comprising the steps of: (a) quantifying the nucleic acid of Claim 6 in the biological sample; and (b) estimating that the biological sample is cancerous in a case that the quantity value of the nucleic acid ~~of Claim 6~~ in the biological sample is 1.5 times or more than that in a control biological sample.

23. (currently amended) The method of Claim 22, comprising the steps of: (a) hybridizing at least one ~~of the~~ analytical nucleic acids ~~of Claim 13~~ to the nucleic acid ~~of Claim 6~~ in the biological sample; (b) amplifying the nucleic acid ~~of Claim 6~~; (c)

hybridizing the analytical nucleic acid ~~acids of Claim 13~~ to the amplification product; (d) quantifying a signal rising from said amplification product and said analytical nucleic acid hybridized; and (e) estimating that the biological sample is cancerous in the case that the quantity value of said signal is 1.5 times or more than that of a corresponding signal of a control biological sample.